

**INDIANA DEPARTMENT OF TRANSPORTATION (INDOT)
SPECIFICATIONS & SPECIAL PROVISIONS 2015/2016 SALT BID**

FOR TREATED/UNTREATED SODIUM CHLORIDE

****SPECIAL PROVISIONS****

1.0 SCOPE OF WORK

The work to be performed consists of furnishing and delivering sodium chloride to various locations throughout Indiana for use in winter maintenance operations. Sodium Chloride will be in accordance with the 2014 Indiana Department of Transportation Standard Specifications (Sections 913.03) and the Supplemental Specifications at bid due date and time, and all applicable rules and regulations at the federal, state and local levels.

2.0 SPECIFICATIONS

Sodium Chloride

Sodium Chloride shall be rock salt or solar salt conforming to the requirements of AASHTO M 143, Type I Grade I, with a moisture content not exceeding two (2) percent. Sampling shall be in accordance with Indiana Testing Method (ITM) 810). Sampling frequency shall be as set out in the INDOT manual entitled, "Manual for Frequency of Sampling and Testing and Basis for Use of Materials, revised January 2015" The rapid test method referenced in AASHTO M 143, Annex A1 shall be used for both routine acceptance testing and for resolution of disputes concerning chemical composition. Material not complying with these requirements shall be paid for at a reduced price as set out under "Deductions" in the Special Provisions (See Section 8.0). All material furnished shall be chemically treated to prevent caking, and shall be free of foreign matter, lumps and free water.

Treated Sodium Chloride

Treated sodium chloride shall be the same rock salt conforming to the requirements of AASHTO M 143, Type I Grade I, with a moisture content not exceeding two (2) percent. Sampling shall be in accordance with Indiana Testing Method (ITM) 810). Sampling frequency shall be as set out in the INDOT manual entitled, "Manual for Frequency of Sampling and Testing and Basis for Use of Materials, revised January 2015" The rapid test method referenced in AASHTO M 143, Annex A1 shall be used for both routine acceptance testing and for resolution of disputes concerning chemical composition. AASHTO M 143 treated with a combination of magnesium chloride and corrosion resistant products in accordance with the specifications contained herein. The Chemical to prevent caking is not needed for treated salt. Material not complying with these requirements shall be paid for at a reduced price as set out under "Deductions" in the Special Provisions (See Section 8.0)

The treatment method must allow for a completely uniform treatment of the sodium chloride *by Contractor* before the sodium chloride reaches INDOT property. The treatment process for the sodium chloride must follow all federal, state, and local laws and regulations. This sodium chloride shall be the

same sodium chloride specified above, but containing an additional treatment consisting of a combination of magnesium chloride and corrosion resistant products.

The liquid treatment (final product) must contain a percentage of magnesium chloride solution and a percentage of corrosion resistant products acceptable to the Buyer. This product must exhibit corrosion resistance in accordance with the standards of the Pacific Northwest Snowfighters (PNS) Association, as provided below. This product must be actively marketed and sold as a treatment for sodium chloride stockpiles, and must provide for some or all of the following benefits related to deicing:

- A. Increased corrosion resistance over regular sodium chloride.
- B. Increased penetration of sodium chloride in snow and ice pack.
- C. Reduced “bounce & scatter” of sodium chloride from the roadway (applied with spreader equipment).
- D. Increase in the *residual effects* of sodium chloride applications.
- E. Increase in the effective temperature range of sodium chloride.

The treatment must allow for safe and effective use of the sodium chloride in conventional sodium chloride spreader equipment found on highway trucks. When treated according to the manufacturer’s instructions and at the designated application rate, the finished sodium chloride product shall result in no leaching, and shall not result in freezing or clumping of the sodium chloride in either storage or application.

The product is preferred to be a tested and proven brand that has been on the market and sold for at least one year (or one winter season). Contractor shall submit with the bid official testing data and literature that verifies that the product meets specifications. INDOT may also grab test Contractor’s product to determine compliance with specifications. To the extent there is a conflict between Contractor’s testing data and INDOT’s test results, INDOT may, in its sole discretion, choose which results to rely on. Contractor shall submit any samples upon request to INDOT at no Cost to the INDOT. References for other state agencies and municipalities that have successfully used this product, as a sodium chloride pile treatment in the recent past shall also be submitted. INDOT reserves the right to use or test new products that has been on the market less than a year.

3.0 INSPECTION

All Sodium Chloride and Treated Sodium Chloride delivered will be visually inspected at time of delivery and samples taken for laboratory analysis of gradation, purity and moisture content in accordance with ITM 810.

4.0 REJECTION

Any material delivered which contains lumps, foreign matter or free water shall be rejected. In the event the material has been loaded or dumped prior to rejection it shall be immediately reloaded or removed by the vendor within 48 hours of notification of rejection. Failure to remove the material will result in liquidated damages in the amount of \$10.00 per ton for each day the salt remains on INDOT property.

5.0 DELIVERY

Deliveries shall be made during regular working hours when possible, and will be accepted at other times only when prior arrangements have been approved by the District Highway Maintenance

Director, designee or the District person responsible for coordinating salt deliveries. No payments will be made for any load for which a delivery ticket, signed by an Indiana Department of Transportation representative, cannot be produced. Delivery tickets for all deliveries shall indicate gross, tare and net weights, order number, locations of stockpile from which shipment is made, and point of delivery. Weights will be checked at random for accuracy of the delivery ticket weights. The Indiana Department of Transportation reserves the right to require any truck to go to the nearest available certified scales to check weights at no additional cost to the Indiana Department of Transportation.

A. Routine Deliveries Beyond Early Delivery Final Date

Vendor shall make delivery in trucks with solid or waterproof tarps to stockpile locations within any Sub-District location for which it has received Award of Contract. Delivery shall be completed within nine (9) calendar days after placement of order. For each calendar day that delivery extends beyond this 9-day limit, INDOT reserves the right to assess liquidated damages at two percent (2%) per day not to exceed a maximum of 10% of the order and will be deducted from any money due the Vendor, not as a penalty but as liquidated damages. Orders shall be placed by telephone during regular working hours to the office specified by the vendor. The vendor should provide a single telephone number for all orders made for each purchase order. The vendor shall provide order confirmation via e-mail or fax, so that each District can provide verification for each telephone order.

B. Early Delivery Period

The vendor shall furnish and deliver the Early Storage Requirements at the locations listed on the attached sheets (Bid List.xls, "Early Storage Requirements" spreadsheet) at all salt storage buildings or outside storage areas as follows:

- La Porte and Fort Wayne Districts: 50% of order delivered on or before October 15, 2015 and 100% delivered on or before November 15, 2015.
- Crawfordsville, Greenfield, Seymour and Vincennes District: 50% of order delivered on or before November 1, 2015 and 100% delivered on or before December 1, 2015.

For each calendar day that early storage requirements for each bidding unit are not complete after the time specified, INDOT reserves the right to assess liquidated damages at two percent (2%) per day not to exceed a

maximum of 10% of the order and will be deducted from any money due the Vendor, not as a penalty but as liquidated damages. INDOT is committed to purchasing 100% of the Early Fill amounts listed by INDOT district (as listed in the INDOT Early Fill Requirement spreadsheet), not sub-district.

6.0 BASIS OF PAYMENT

The Indiana Department of Transportation is requesting bid prices as specified in Bid List.xls. Price submitted by respondent is the price for purchases from 0% to the maximum of the commitment range of 120%. Any additional tons needed beyond 120 percent will be by mutual agreement of the parties, including the price thereof.

The quantities shown by INDOT sub-district are estimates only and may be adjusted at the option of the Indiana Department of Transportation. INDOT commits to purchase at least 80% of the total tonnage listed by district; quantity in Bid List.xls is 100%.

- 80-120% Commitment Range - All INDOT Districts (Crawfordsville, Fort Wayne, Greenfield, LaPorte, Seymour, and Vincennes)

- o Delivered is price of salt per ton delivered to the INDOT location
- o Delivered + Loaded is price of salt per ton to deliver to the INDOT location and load the salt via a conveyor (see section 9.0 for loading requirements)
- o Pick Up is the price of the salt per ton

7.0 INVOICING

The vendor(s) shall invoice the Indiana Department of Transportation no more than once per week for each Subdistrict location where business has been transacted. Invoices shall itemize the daily activity for that Subdistrict/location.

In accordance with Section 5.0, DELIVERY and Section 8.0, DEDUCTIONS of the Specifications & Special Provisions, the Indiana Department of Transportation will notify the vendor(s) in writing no more than twice a month for each Unit or Subdistrict location when liquidated damages for late deliveries or deductions for non-compliance with specifications are being assessed. The vendor(s) shall submit a credit memorandum to INDOT for the assessed liquidated damages or deductions within fifteen (15) calendar days from the date of written notification from INDOT.

Payment will be made following necessary testing and evaluation as described in the contract terms. The department shall complete necessary testing and evaluation within ten (10) calendar days after receipt; if the department fails to test and evaluate within this timeframe, payment shall at such time be authorized.

8.0 DEDUCTIONS

After testing sodium chloride, deductions will be made for non-compliance with specifications on the following basis:

A. CHEMICAL COMPOSITION

Results of the purity test shall be rounded up to the nearest whole percentage point. (.5 rounded up). A deduction of \$1.00 (one dollar) per ton will be made for each percentage point from 94 percent through 90 percent and \$2.00 (two dollars) per ton for each percentage point from 89 percent through 85 percent. Material with purity less than 84.5 percent will be paid for as snow and ice abrasives at a rate of \$4.00 (four dollars) per ton.

B. MOISTURE

If the moisture content exceeds two (2) percent, the weight to be paid for will be the gross weight of the Sodium Chloride minus twice the weight of the excess moisture computed as follows: Weight to be paid for = $G \times (104 - 2(m)) / 100$

G=Gross weight of material (wet).

M=Percent of moisture to the nearest 0.5 percent based on oven dry weight.

C. GRADATION

Sieve Sizes	Percent Passing
½ inch (12.5mm)	100
3/8 inch (9.5 mm)	95 - 100
No. 4 (4.75 mm)	20 - 95
No. 8 (2.36 mm)	10 - 65
No. 30 (0.60 mm)	0 - 20

When test results for the Sodium Chloride furnished exceed the gradation requirements above, adjustment points will be assessed as follows:

ADJUSTMENT POINTS FOR GRADATION

Sieve Size

Adjustment Points	½ inch	3/8 inch	No. 4	No. 8	No.30
	12.5 mm	9.5 mm	4.75 mm	2.36 mm	0.60 mm
For each 1.0% up to 3.0%					
Out of Tolerance	1.0	1.0	1.0	1.0	3.0
For each 1.0% > 3.0%					
Out of Tolerance	1.0	1.0	1.0	1.0	6.0

Gradation adjustment points for the quantity represented shall be the sum of points calculated for up to 3% out of tolerance and the points calculated for greater than 3% out of tolerance.

The minimum required number of tests will be as set out in “INDOT Manual for Frequency of Sampling and Testing and Basis for Use of Material, revised January 2015. Samples will be taken by or under the supervision of a representative of the department. All materials being used are subject to inspection, test, or rejection at any time.

Where the Indiana Department of Transportation determines that a sample does not meet specifications in chemical composition, moisture and gradation, the following shall be the method of determining the final price per ton:

- 1) First, tons eligible for payment shall be calculated as noted in Section B. Moisture.
- 2) Second, a deduction, as specified above, will be made for gradation failure.
- 3) Finally, the deduction will be determined for chemical composition, unless the chemical composition falls below 84.5 percent at which time the entire amount will be paid for as snow and ice abrasives as noted in Section A, Chemical Composition.

9.0 REQUIREMENTS FOR DELIVERY

The following special provisions apply to all Indiana Department of Transportation salt storage sites, except where noted on the Special Provision pages.

- A. Delivered and Loaded; shall mean placement of salt in the departments designated storage buildings, with equipment and labor furnished by the vendor or the vendors contracted hauler. Loading shall be directly from

the truck to the storage building, by way of loading equipment, and salt shall **not** be placed on the ground outside a building prior to loading in the building.

- B. Loading equipment shall be provided by the vendor or the vendors contracted hauler, which shall be capable of fully loading INDOT's storage buildings. The vendor may review specific sites in order to determine equipment required. A pre-planned time for such visits is required. Loading equipment should include conveyors or other equipment as **approved** by the Department.
- C. Failure to load salt in the Departments salt storage building will result in a deduction, as liquidated damages, from the price bid for salt delivered and loaded. The amount shall be \$1.00 per ton plus the price differential charged for the loaded price.
- D. Delivered No Deduction; shall mean salt that is delivered but not loaded in the departments designated storage buildings. **This delivery method must be pre-approved by the District Highway Management Director and marked on the delivery ticket as such.** Deliveries without prior authorization and the salt not loaded in the building will result in liquidated damages as listed above.
- E. Delivery tickets must be marked by the Department as:

"Delivered and Loaded" to indicate full payment for delivery and loaded as bid. (Salt properly placed in the building.)

"Delivered" to indicate material delivered but not loaded resulting in the deduction for liquidated damages above. (This represents dumped without authorization.)

"Delivered - No Deductions" to indicate that the Department required a delivery outside a storage building. (This represents dumped with permission.)

The vendor is required to provide delivery ticket in the format that contains the above terms to facilitate faster actions.

- F. The vendor will be responsible for any damage to the salt shed resulting from improper piling of salt. Further, the vendor may be required to move any material improperly stacked.
- G. Conveyor loading only is acceptable at all Districts. Slinger loading is not acceptable. The Indiana Department of Transportation reserves the right to reject vendor loading if the price is unacceptable.

10.0 DEFINITIONS AND TERMS

For the purposes of this contract, calendar day and work day shall be defined as:

Calendar Day. Every day shown on the calendar.

Work Day. A calendar day, exclusive of Saturdays, Sundays and State recognized legal holidays.

REFERENCED

INDIANA DEPARTMENT OF TRANSPORTATION STANDARD

SPECIFICATIONS 2014

(With Supplemental Specifications in affect at time of letting)

<http://www.in.gov/dot/div/contracts/standards/book/index.html>

SECTION 913 – MISCELLANEOUS

(913.03 Sodium Chloride. Sodium chloride shall be in accordance with AASTHO M 143). Rock salt shall be used for de-icing purposes. Either rock salt or evaporated salt may be used for stabilization.

MANUAL FOR FREQUENCY OF SAMPLING AND TESTING AND BASIS FOR

USE OF MATERIAL, REVISED, JANUARY 2015. <http://www.in.gov/indot/files/FreqOfSamplingAndTestingSM.pdf>

Indiana Test Method or Procedure

ITM 810-09T Deicing Material, Dated November 6, 2009 http://www.in.gov/indot/div/M&T/itm/pubs/810_testing.pdf

11.0 FAILURE TO MEET OBLIGATIONS

If the vendor is unable to meet its agreement obligations as set out in this invitation, the Indiana Department of Transportation, at its option may purchase materials from any other available source on the open market, cancel the agreement or applicable portions thereof, and/or may award the portions so cancelled to another supplier.

In the event the State is required to purchase the materials from another source as a result of the contracted vendor not being able to meet their commitment, any additional expenses in excess of the agreement price will be deducted from any money due the contracted vendor.